

Application No. 09/944,049  
Amendment dated July 2, 2003  
Reply to Office Action of March 17, 2003

### REMARKS/ARGUMENTS

#### I. Status of the Claims

Prior to entry of this amendment, claims 1-71 and 77-110 were pending, with claims 1-71 having been withdrawn from consideration as drawn to non-elected inventions. Upon entry of this amendment, claims 77-110 are canceled without prejudice or disclaimer and new claims 111-143 are introduced. Thus, claims 1-71 and 111-143 are pending following entry of this amendment, with claims 1-71 withdrawn from consideration. This amendment is made to focus the claims on inventions of current commercial importance.

The new claims find support throughout the specification, including, for example, at pages 45-51.

#### II. Information Disclosure Statement

The Office Action did not include a checked-off version of the information disclosure statement mailed on January 22, 2003 (received by the Patent Office on January 27, 2003) to confirm consideration by the Examiner. Applicants request that if the Examiner has not already done so that this IDS be considered and a copy of the checked-off version of the IDS be sent to Applicants in the next communication from the Patent Office. It is also requested that the supplementary IDS mailed on April 15, 2003 be considered and a checked-off copy of this IDS also sent with the next communication.

#### III. Claim Objections

Claim 80 is objected to as being of improper dependent form. Cancellation of this claim renders this objection moot.

#### IV. Claim Rejections under 35 U.S.C. § 112

Claims 77-110 were rejected for allegedly being indefinite and not being sufficiently enabled. Cancellation of these claims renders this rejection moot. New claims 111-143 focus on

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compositions that comprise a replication competent attenuated cytomegalovirus (CMV) that can generate an immune response in a mammal and a pharmaceutically acceptable carrier, wherein the CMV is attenuated through inhibition of expression or activity of US28 and/or a US28 homolog. Reconsideration is requested in view of these new claims.

V. Claim Rejections under 35 U.S.C. § 102(b)

A. Hwang et al.

Claims 77, 78, 81-83, 84 and 86-91 were rejected under 35 U.S.C. § 102(b) as being anticipated by Hwang et al. (*Microbiology and Immunology* 43:307-310, 1999; hereinafter "Hwang"). Cancellation of these claims renders the rejection of these specific claims moot. For the reasons that follow, it is submitted that Hwang also fails to anticipate the current claims.

Hwang discusses a plasmid containing an HCMV intermediate-early gene promoter linked only to a single encoding segment, which segment codes for the HCMV protein gB. Hwang states that this construct expresses HCMV gB in mammalian cells (page 307, col. 2, last paragraph). Hwang, however, fails to teach or suggest the presently claimed compositions that comprise a replication competent attenuated CMV that can generate an immune response in a mammal and a pharmaceutically acceptable carrier, wherein the CMV is attenuated through inhibition of expression or activity of US28 and/or a US28 homolog. For example, the Hwang construct is not an attenuated CMV that can replicate in a mammal. So for at least this reason, Hwang fails to teach or suggest each and every element as required in an anticipation rejection. Accordingly, it is requested that this rejection be withdrawn.

B. Jones

Claims 77 and 81-83 stand rejected as being anticipated by U.S. Patent 5,877,004 to Jones et al. ("Jones"). The Office Action states that Jones discusses HCMV compositions in which the US28 gene has been deleted.

In response, it is first noted that claims 77 and 81-83 have been cancelled, thus rendering this specific rejection moot. It is further submitted that Jones also does not teach or suggest

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compositions that include each and every element of the new claims. For example, the current compositions include a pharmaceutically acceptable carrier, which is neither discussed or suggested by Jones. So for at least this reason, Jones fails to anticipate the current claims. As such, it is requested that this rejection be withdrawn.

VI. Rejections under 35 U.S.C. § 103(a):

Claims 92-110 stand rejected as obvious over Hwang in view of Kropff et al (Journal of General Virology 78:2009-2013, 1997; hereinafter "Kropff") or Kravitsz et al. (Journal of General Virology 78:1999-2007, 1997; hereinafter "Kravitz").

While the rejected claims have been canceled, it is submitted that these cited references fail to render the presently claimed invention obvious. This is because the teachings of these references, even when combined, do not teach or suggest each and every element of the claimed invention as required to establish a *prima facie* case of obviousness. The shortcomings of Hwang have been described *supra*, and neither Kropff and Kravitsz overcome these shortcomings. Kropff and Kravitsz instead simply discuss glycoprotein B (gB) genes from rhesus monkey CMV that have sequence similarity to the gB gene in HCMV. So, for instance, these collective references still fail to either teach or suggest compositions that comprise a replication competent attenuated CMV that can generate an immune response in a mammal, particularly one that is attenuated through inhibition of expression or activity of US28 and/or a US28 homolog. So for at least this reason, these cited references fail to render the present claims obvious. Accordingly, it is requested that this rejection be withdrawn.

If the Examiner believes a telephone conference would expedite prosecution of

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this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,



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